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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/549,675

03/21/2006

Christian Widmer

125161

8446

25944

7590

09/27/2007

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

BARRY, CHESTER T

ART UNIT

PAPER NUMBER

1724

MAIL DATE

DELIVERY MODE

09/27/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/549,675

Applicant(s)

WIDMER ET AL.

Examiner

Chester T. Barry

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/4/07; 3/21/06</u> | 6) <input type="checkbox"/> Other: _____ |

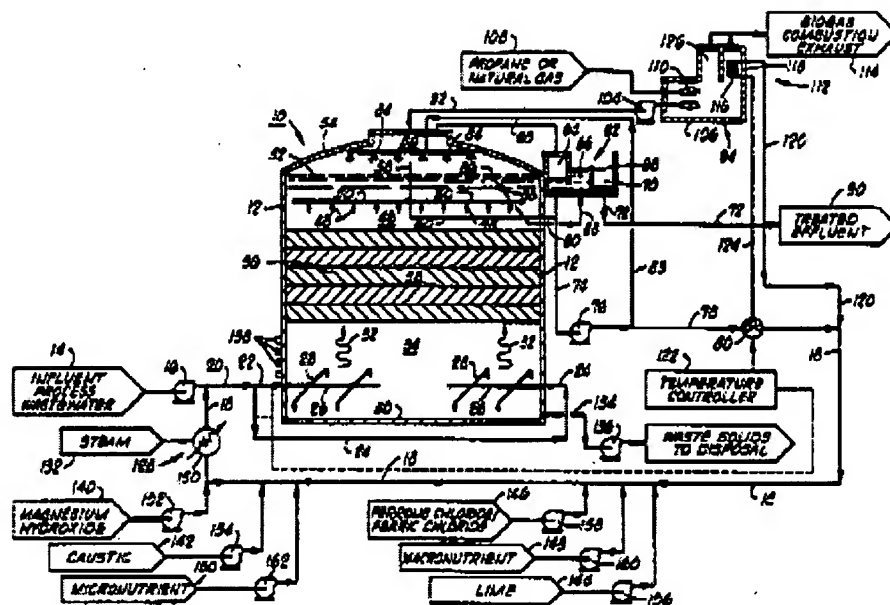
Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE10063888 and USP 20050006295.

DE10063888 describes a process for treating waste in which the waste is treated mechanically (mixing) and biologically (fermentation in a biogas plant). Process water from which organic matter has been removed obtained by anaerobic fermentation is stripped of dissolved ammonia gas. The solid liquid separation and reverse osmosis are conducted upstream of the stripping process. See Fig 1, paragraph [003], and claim 1. DE10063888 does not describe the separation method used before reverse osmosis. That is, neither UF nor mechanical fine screening is disclosed by the reference. It would have been obvious to the hypothetical person having ordinary skill in the art to have selected a suitable screening process upstream of the RO step because USP 20050006295 suggest pretreating the input to an RO unit by a microfiltration or ultrafiltration membrane filter upstream of a downstream RO. See [0005]. The limitations of claims 2 – 19 are within the level of skill because they relate to known result-effective variables.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being obvious over USP 5228995 to Stover and DE 196 10 056. Stover (shown below) describes a waste water treatment reactor having means for generating biogas which upflows through the bed, and scum removal means described at col 2 lines 54-56 and col 10 lines 61-63. The statement of intended use, i.e., to be used in performing the claim 1 invention, was carefully considered, but found upon such careful consideration to be non-limiting of the

Art Unit: 1724

structure of the claimed apparatus. The claim is directed to an apparatus, not a method of use thereof.

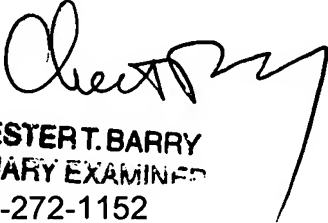


DE 196 10 056 describes injection of air into a biogas-generating bed bioreactor. It would have been obvious to have done so for the reasons given in DE 196 10 056 for doing so.

Claims 1 – 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, it is unclear whether the process is limited to processing of only “residual waste” type waste substances. It is suggested that, “processing of waste substances, in particular of residual waste” be changed to,

Art Unit: 1724

“processing of residual waste substances, ~~in particular of residual waste~~.” Similar basis for rejection lie with “in particular” as recited in claim 20. At the end of claim 1 line 3, a comma (“ , ”) is required. Claim 1 line 11 is unclear in that it is unclear what materials other than pollutants and salts fall within the scope of “etc.” Similar grounds for rejection lie with claim 11 per “etc.” In claim 2, it is unclear whether “PCP” refers to “physico-chemical processing.” Per claim 4, it is unclear whether an apparatus or a process is being claimed because claim 4 recites “a catalyst column” not a step of processing the process water through a catalyst column. Similar objections lie with claim 6 vis-à-vis the “cooler” recitation. Similar objections lie with claim 13 with respect to the “means for injection.” Per claim 10, “PCP plant” lacks antecedent basis in claims 1 and 9. Claims 1 and 12 fail to provide antecedent basis for claim 15’s recitation of “biogas.”



CHESTERT.T.BARRY
PRIMARY EXAMINER
571-272-1152